



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBW6305G18631-3G
Job Sheet 185885



Part No: RBW6305G18631-3G

Job Qty: 3 ea

Part Name: Ecs Drive Quill Housing Remover



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/6/18

Job Tracking No:

Due Date: 12/11/18

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG RBW6305G18631-3G Rev 2 IPP Rev A 18.02.15 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	3 pcs		12/11/18	0.00	0.00	Purchasing		JAN 18 2019
110	Packaging	3 pcs		12/11/18	0.00	0.00	Packaging2		JAN 18 2019
120	QC	3 pcs		12/11/18	0.00	0.00	QC6		38
130	Packaging	3 pcs		12/11/18	0.00	0.00	Packaging3		JAN 21 2019
140	QC21-FG	3 Ea		12/11/18	0.00	0.00	QC21		JAN 21 2019

Part Op 100 - Issue PO to ARROW TECH MACHINE WORKS P/O: 041615 MANUFACTURE RBW6305G18631-3G AS PER
Descriptions: DWG -Certificate of conformity is required

METEC

NOV 06 2018 x 3 Rh

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW6305G18631-3GP	Ecs Drive Quill Housing Remover	3 Ea (1 ea)	100-Purchasing	5145970

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBW6305G18631-3GP	3	0	0

Part Specifications

Specifications could not be found.

Plex 11/6/18 11:18 AM dart.Lussier.Patrick



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S145974



Part: RBW6305G18631-3G

Job No: 185885

Serial No/Batch: S145974

Revision: 2

Inspector:

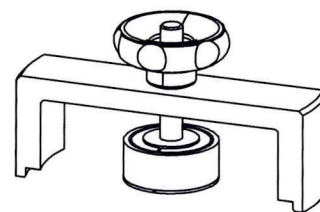
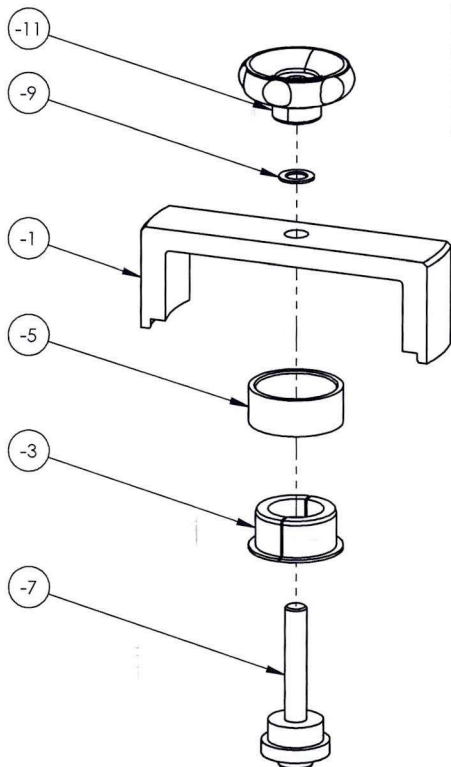
Exp Date:

Instructions:

Date: 01/18/19

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		CH'D -1 BOM INFO PER S.E. CH'D -1 ENGRAVE NOTES PER R.W. & RADIUS FROM R.100 PER G.E. CH'D -3 CUTLINE GAP FROM .040 PER G.E.	5/9/2011	RJC	RW
1A		CH'D TOOL NAME WAS ECS DRIVE QUILL HOUSING REMOVER IS TOOL, ECS DRIVE QUILL SEAL HOUSING REMOVER TO MATCH PARTS MANUAL.	11/4/2013	RJC	RW
2	17-0091	UPDATED TO NEW STANDARD. ADDED OEM REF NOTE. DELETED DIMS 3.585, 5.448. -1 CH'D DIMS WAS 2X Ø8.255 IS Ø8.255. WAS 2X Ø8.813 IS Ø8.813. WAS 2X Ø7.390 IS Ø7.390. WAS 1.900 IS 1.90. WAS 2X 30° IS 30°. WAS 2X 2.990 IS 2.99. WAS 2X.276 IS .276. WAS 2X 2.362 IS 2.36. WAS 2X .063 IS .06. WAS R.125 IS R.13. WAS 2X.12 X .45° IS .12 X .45°. -3 CH'D DIMS WAS 1.141 IS 1.14. WAS BASIC. .079 IS .078-.080. WAS BASIC. .058 IS .057-.059. WAS BASIC Ø1.784 IS Ø1.783-1.785. DELETED DIM 2X 1.316. CORRECTED GD&T. -5 CH'D DIM WAS 1.061 IS 1.06. CORRECTED GD&T WAS 1 IS // -7 CH'D MAT'L WAS 4140 Q&T IS 4140/4142. ADDED HEAT TREAT RC 28-34. CH'D FINISH WAS CAD PLATE YELLOW QQ-P-416F TYPE II CLASS II IS ZINC PLATE ASTM B633 TYPE I SCC. CH'D DIMS WAS 4.725 IS 4.73. WAS .070 IS .07. WAS 60° IS 30°. DELETED DIM .178. ADDED DIM 3.16 MIN. -11 CH'D B/O REF WAS REID #KHN-115 IS 5/8-11 X Ø3.27 X 1.57 (MSC #52216553).	4/20/2017	DPD	JAG



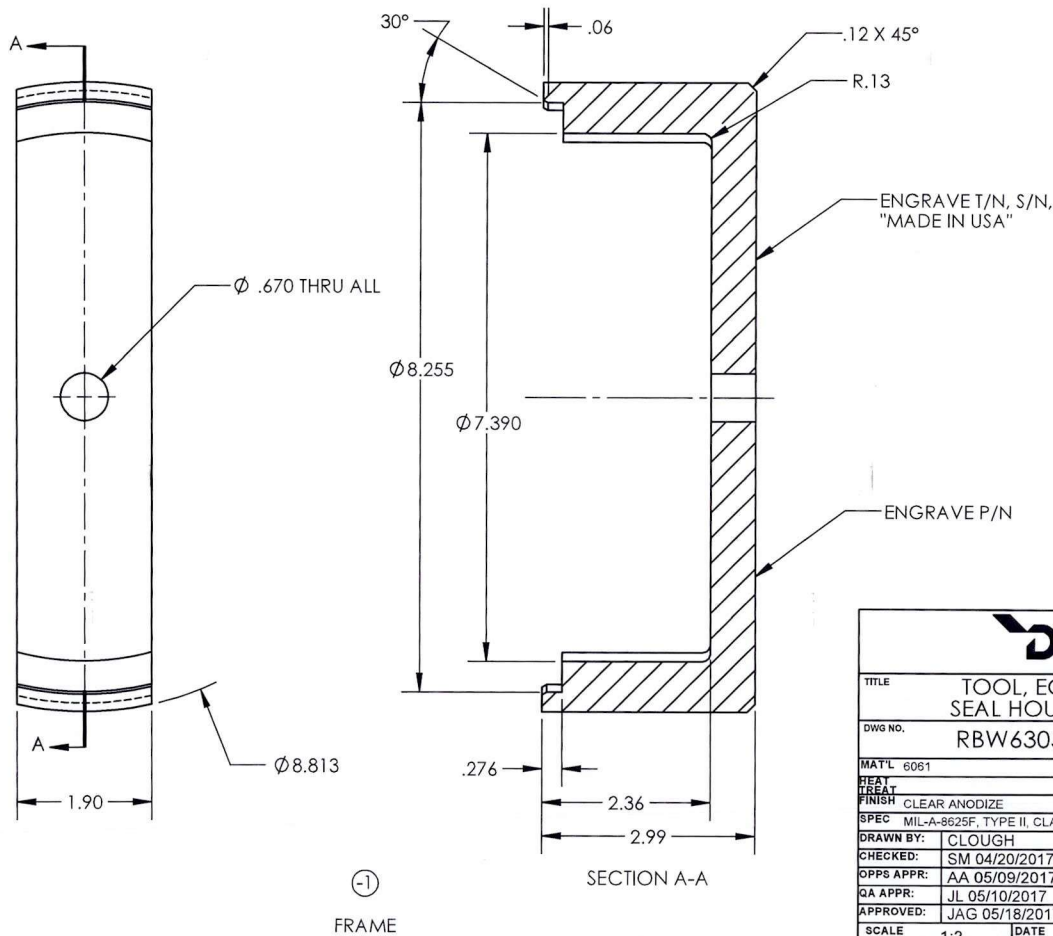
- NOTES:
1. PART OF KIT RBW6305G01531-3G, BOX TWO RBW6305G19731-3G.
2. REF. AGUSTA T/N: 3G6305G18631.

DART AEROSPACE																									
TITLE TOOL, ECS DRIVE QUILL SEAL HOUSING REMOVER																									
DWG NO. RBW6305G18631-3G	REV 2																								
<table border="1"> <tr> <td>MAT'L</td> <td>UNLESS OTHERWISE SPECIFIED</td> </tr> <tr> <td>HEAT TREAT</td> <td>DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>FINISH</td> <td>.XXX ± .005 FRACTIONS ± 1/8</td> </tr> <tr> <td></td> <td>.XX ± .01 ANGLES ± 5°</td> </tr> <tr> <td></td> <td>.X ± .1 SURFACES = 125</td> </tr> <tr> <td>SPEC</td> <td>1. BREAK ALL SHARP EDGES .015 x 45° OR .015R</td> </tr> <tr> <td>DRAWN BY: CLOUGH</td> <td>2. DIMENSIONAL LIMITS APPLY AFTER PLATING</td> </tr> <tr> <td>CHECKED: SM 04/20/2017</td> <td>3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009</td> </tr> <tr> <td>OPPS APPR: AA 05/09/2017</td> <td>USED ON MODEL</td> </tr> <tr> <td>QA APPR: JL 05/10/2017</td> <td>AW139</td> </tr> <tr> <td>APPROVED: JAG 05/18/2017</td> <td></td> </tr> <tr> <td>SCALE 1:4</td> <td>DATE 2/4/2011</td> </tr> </table>		MAT'L	UNLESS OTHERWISE SPECIFIED	HEAT TREAT	DIMENSIONS ARE IN INCHES	FINISH	.XXX ± .005 FRACTIONS ± 1/8		.XX ± .01 ANGLES ± 5°		.X ± .1 SURFACES = 125	SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	DRAWN BY: CLOUGH	2. DIMENSIONAL LIMITS APPLY AFTER PLATING	CHECKED: SM 04/20/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	OPPS APPR: AA 05/09/2017	USED ON MODEL	QA APPR: JL 05/10/2017	AW139	APPROVED: JAG 05/18/2017		SCALE 1:4	DATE 2/4/2011
MAT'L	UNLESS OTHERWISE SPECIFIED																								
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OPPS APPR: AA 05/09/2017	USED ON MODEL																								
QA APPR: JL 05/10/2017	AW139																								
APPROVED: JAG 05/18/2017																									
SCALE 1:4	DATE 2/4/2011																								

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	FRAME	6061		2
			-3	1	TWO HALF KEEPER	6061		3
			-5	1	LOCK RING	6061		4
			-7	1	PULLER	4140/4142		5
		B/O	-9	1	WASHER	ALUMINUM	Ø5/8 I.D. X Ø1 O.D. X .063 (MCMaster-CARR #92661A745)	1
		B/O	-11	1	6 LOBE KNOB	PLASTIC	5/8-11 X Ø3.27 X 1.57 (MSC #52216553)	1

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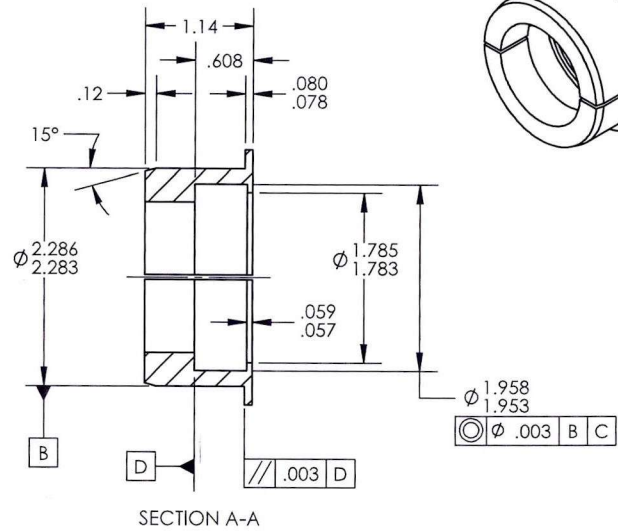
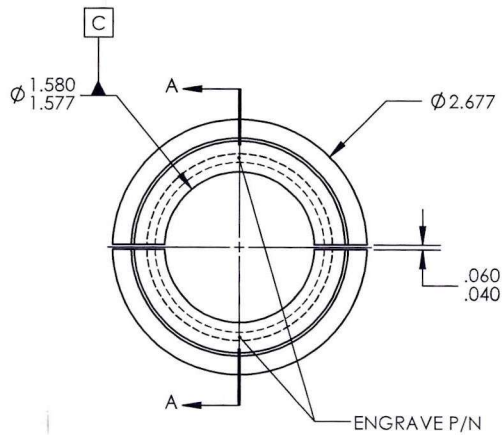
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		CH'D -1 ENGRAVE NOTES PER R.W. & RADIUS FROM R.100 PER G.E.	5/9/2011	RJC	RW
2	17-0091	-1 CH'D DIMS WAS 2X Ø8.255 IS Ø8.255, WAS 2X Ø8.813 IS Ø8.813, WAS 2X Ø7.390 IS Ø7.390, WAS 1.900 IS 1.90, WAS 2X 30° IS 30°, WAS 2X 2.990 IS 2.99, WAS 2X .276 IS .276, WAS 2X 2.362 IS 2.36, WAS 2X .063 IS .06, WAS R.125 IS R.13, WAS 2X .12 X 45° IS .12 X 45°.	4/20/2017	DPD	JAG



DART AEROSPACE	
TITLE TOOL, ECS DRIVE QUILL SEAL HOUSING REMOVER	
DWG NO. RBW6305G18631-3G-1	REV 2
MATL 6061	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH CLEAR ANODIZE	.XXX ± .005 FRACTIONS ± 1/8
SPEC MIL-A-8625F, TYPE II, CLASS I	.XX ± .01 ANGLES ± 5°
DRAWN BY: CLOUGH	.X ± .1 SURFACES = 125
CHECKED: SM 04/20/2017	1. BREAK ALL SHARP EDGES
OPPS APPR: AA 05/09/2017	.016 x 46° OR .016R
QA APPR: JL 05/10/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED: JAG 05/18/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:2	USED ON MODEL
DATE 2/4/2011	AW139
SHEET 2 OF 5	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		CHD -3 CUTLINE GAP FROM .040 PER G.E.	5/9/2011	RJC	RW
2	17-0091	-3 CHD DIMS WAS 1.141 IS 1.14, WAS BASIC .079 IS .078-.080, WAS BASIC .058 IS .057-.059, WAS BASIC Ø1.784 IS Ø1.783-1.785, DELETED DIM 2X 1.316, CORRECTED GD&T.	4/20/2017	DPD	JAG

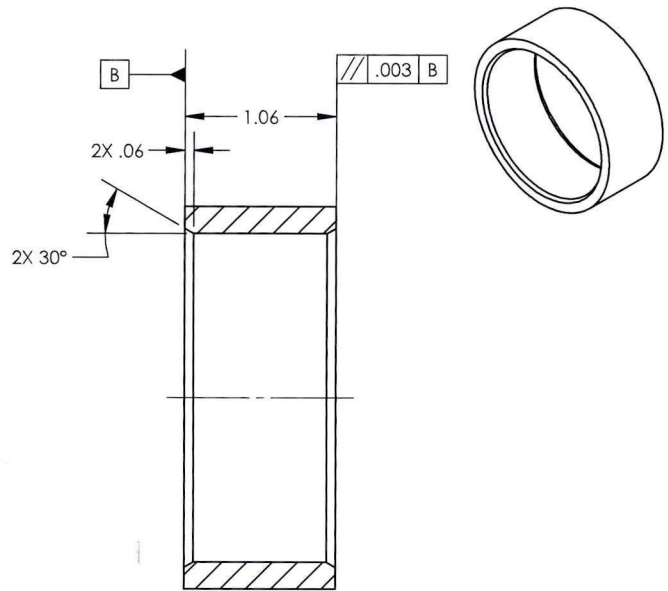
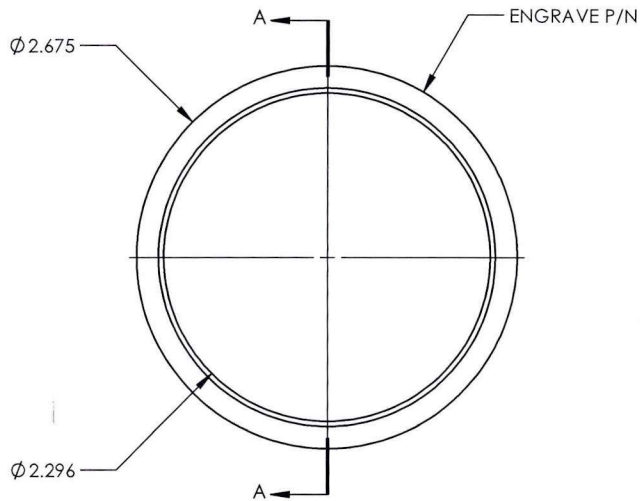


(-3)
TWO HALF KEEPER

DART AEROSPACE	
TITLE TOOL, ECS DRIVE QUILL SEAL HOUSING REMOVER	
DWG NO. RBW6305G18631-3G-3	REV 2
MAT'L 6061	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH CLEAR ANODIZE	.XXX ± .008 FRACTIONS ± 1/8
SPEC MIL-A-8625F, TYPE II, CLASS I	.XX ± .01 ANGLES ± 5°
DRAWN BY: CLOUGH	.X ± .1 SURFACES = 125/
CHECKED: SM 04/20/2017	1. BREAK ALL SHARP EDGES
OPPS APPR: AA 05/09/2017	.016 x 45° OR .016R
QA APPR: JL 05/10/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED: JAG 05/18/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 2:3	DATE 2/4/2011
SHEET 3 OF 5	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
2	17-0091	-5 CH'D DIM WAS 1.061 IS 1.06. CORRECTED GD&T WAS <u>L</u> IS <u>//</u>	4/20/2017	DPD
				JAG



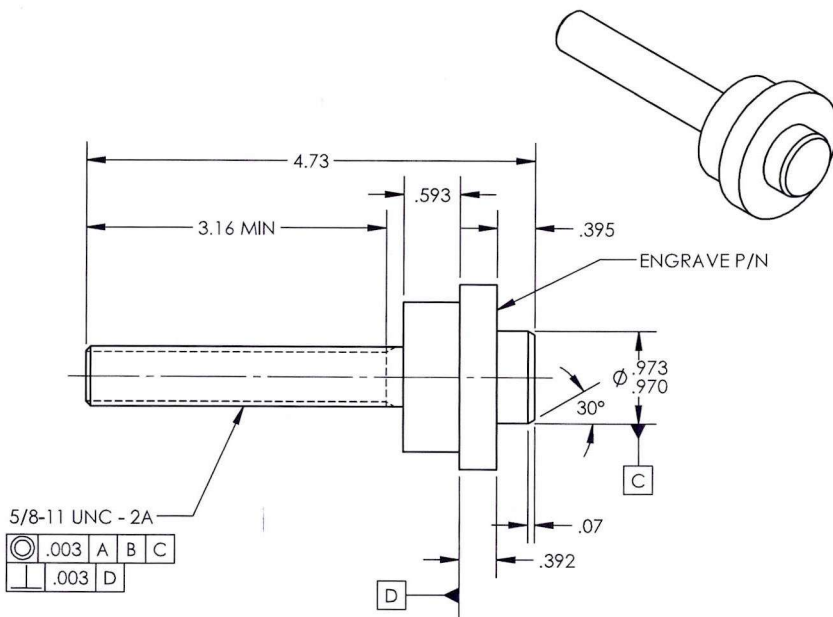
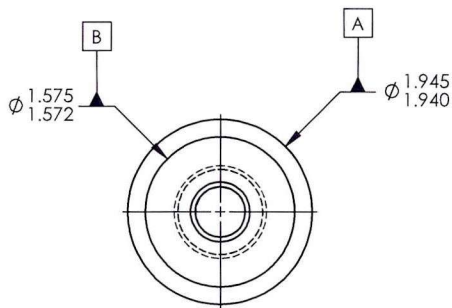
SECTION A-A

(-5)
LOCK RING

DART AEROSPACE	
TITLE TOOL, ECS DRIVE QUILL SEAL HOUSING REMOVER	
DWG NO. RBW6305G18631-3G-5	REV 2
MAT'L 6061	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX $\pm$.005 FRACTIONS $\pm$ 1/8
FINISH CLEAR ANODIZE	.XX $\pm$.01 ANGLES $\pm$.5°
SPEC MIL-A-8825F, TYPE II, CLASS I	.X $\pm$.1 SURFACES = 125
DRAWN BY: CLOUGH	1. BREAK ALL SHARP EDGES
CHECKED: SM 04/20/2017	.015 x 45° OR .016R
OPPS APPR: AA 05/09/2017	2. DIMENSIONAL LIMITS APPLY
QA APPR: JL 05/10/2017	AFTER PLATING
APPROVED: JAG 05/18/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:1	DATE 2/4/2011
	USED ON MODEL AW139
	SHEET 4 OF 5

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
2	17-0091	-7 CH'D MAT'L WAS 4140 Q&T IS 4140/4142. ADDED HEAT TREAT RC 28-34. CH'D FINISH WAS CAD PLATE YELLOW QQ-P-416F TYPE II CLASS II IS ZINC PLATE ASTM B633 TYPE I SC2. CH'D DIMS WAS 4.725 IS 4.73. WAS .070 IS .07. DELETED DIMS .178, 60°. ADDED DIMS 3.16 MIN, 30°.	4/20/2017	DPD
				JAG



(-7)
PULLER

DART AEROSPACE	
TITLE TOOL, ECS DRIVE QUILL SEAL HOUSING REMOVER	
DWG NO. RBW6305G18631-3G-7	REV 2
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT RC 28-34	DIMENSIONS ARE IN INCHES
FINISH ZINC PLATE	.XXX ± .005 FRACTIONS ± 1/8
SPEC ASTM B633 TYPE I SC 2	.XX ± .01 ANGLES ± 5°
DRAWN BY: CLOUGH	.X ± .1 SURFACES = 125
CHECKED: SM 04/20/2017	1. BREAK ALL SHARP EDGES
OPPS APPR: AA 05/09/2017	.015 x 45° OR .015R
QA APPR: JL 05/10/2017	2. DIMENSIONAL LIMITS APPLY
APPROVED: JAG 05/18/2017	AFTER PLATING
SCALE 2:3	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 2/4/2011	USED ON MODEL
	AW139
	SHEET 5 OF 5



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO041615



Supplier: MEM001-VC
Metec Metal Technology Inc.
20 Terry Fox Drive PO Box 781
Vankleek Hill
ON
K0B 1R0 Canada
Phone: 613 678 3957
Fax: 613 678 3956

Attention: Walz, Shigi

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO041615

PO Date: 11/6/18

Due Date: 1/18/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

Revision

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	185887	RBW6305G16031-3GP			Drive Quill Seal Housing Remover As Per Dwg RBW6305G16031-3G Rev. 2	Firmed	-	1/18/19	3 Ea	0 Ea	3 Ea	\$1,750.00/Ea	\$5,250.00
									3 X JAN 18 2019			2310.00	
2	185885	RBW6305G18631-3GP			Ecs Drive Quill Housing Remover As Per Dwg RBW6305G18631-3G Rev. 2	Firmed	-	1/18/19	3 Ea	0 Ea	3 Ea	\$2,500.00/Ea	\$7,500.00
									3 X JAN 18 2019			3310.00	
Grand Total:												\$12,750.00	

Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 1/17/19 8:50 AM dart.Lussier.Patrick

Packing List

Bill Dart Aerospace Ltd.
To: 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 Canada

Ship Dart Aerospace Ltd.
To: 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 Canada

Shipment No: 24532
Shipment Date: 16-Jan-2019
Ship Via: Pick up at METEC
Order Number: 3189
Order Date: 11/15/18

Customer Code: DART
Phone: (613) 632-9577
PO Number: PO041615 ✓
Terms: Net 60 Days

----- Quantity -----								Job
<u>Item</u>	<u>Open</u>	<u>Shipped</u>	<u>B/O</u>	<u>Canceled</u>	<u>Unit</u>	<u>Description</u>	<u>Revision</u>	<u>Number</u>
1	3	3 ✓	0	0	EA	DART-RBW6305G16031-3GP Tool, Drive Quill Seal Housing Remover ✓	2	3189-01
2	3	3 ✓	0	0	EA	DART-RBW6305G18631-3GP Tool, ECS Drive Quill Seal Housing Remover ✓		3189-02

DAS
38
9-89

The delivered goods must be inspected upon receipt to confirm compliance. Should there be discrepancies please notify METEC within 30 days of delivery. The goods are otherwise deemed accepted.

Received In Good Order By



20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 metec@metec.ca

CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

Quantity	Part Number	Part Name	Dwg Rev.#	P.O. Number
3 /	DART-RBW6305G16031- 3GP	Tool, Drive Quill Seal Housing Remover	2	41615 /
3 /	DART-RBW6305G18631- 3GP	Tool, ECS Drive Quill Seal Housing Remover	2	41615 /

DAS
38
9-89

MATERIAL: supplied by METEC

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.

George Theoret

Vankleek Hill, January 16, 2019